
Subject: Re: string animations etc.

Posted by [MKatz843](#) on Sun, 19 Sep 2004 19:56:24 GMT

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I don't know if this will do what you want, but I thought I'd share.
I wrote this eons ago for displaying a progress-bar in the text window. This is for Unix-type command-line implementations of IDL (Mac, Linux, etc.) I have no idea if it would be work in Windows. I'm guessing it won't.

```
;+
;-----
; 2/27/96
; IDL procedure: textmeter.pro
;
; This procedure draws a "meter" on the screen to display what
; fraction of a job has been completed. Calling textmeter with
; x=0 initializes the meter.
;-----
;-
```

```
pro textmeter, x, s0, remain=remain
common block_textmeter, time0, base, n0, n1, backup, name0
if not defined(s0) then s0=""
if not defined(name) then name0=""
if ((x LE 0.01) or (not defined(base))) then begin ; set-up
    time0 = systime(1)
    name0 = s0
    n0 = strlen(s0+':')
    s1 = '----+'
    base="" & for i=1,10 do base=base+s1
    n1 = strlen(base) ; should be 50
    nb = n0+n1+8
    backup="" & for i=0,nb do backup = backup + string(8b)
endif
done = (x GE 1.)
x = 0. > x < 0.9999
nx = floor(x*float(n1))
st=: & for i=1,nx do st=st+'*'
dt = systime(1)-time0
if keyword_set(remain) $
    then if (x EQ 0.) $
        then time="?????????" $
        else time = string(format="(f8.2,' s')", dt*(1.-x)/x) $
        else time = string(format="(f8.2,' s')",dt)
out = s0 + st + strmid(base,nx+1,n1-nx-1) + time + backup
print, format="(a,$)", out
if done then begin
```

```
    print, "  
    print, "  
endif  
return  
end
```

Here's a command-line program to see how it works

```
IDL> textmeter,0.,'hi' & for i=0,100 do begin & textmeter, i/100.,  
'hi' & wait, 0.05 & end
```

Basically, you "initialize" it by sending a 0.0 argument.

The second argument is an optional string which you can use to tell the user what function is being processed, for example. When it's running, sent it values between 0.0 and 1.0 which represent the fraction of the job that has been completed. The text-meter will report the elapsed time. When it reaches 1.0 or greater, it stops.

If you want the meter to predict how much time is remaining, set the /remain keyword, and it will do its best to estimate, assuming the progress information you send it is linear in time.

Note that this function relies on string(8b) being able to back-up the cursor when printing. This works in xterm. Perhaps in some other implementations this might need to be tweaked to make it work. If you write any other text to the screen while this is running, it will disrupt the output, but in a non-fatal way. It just won't look nice anymore. The backing-up essentially erases the line it's just printed and allows the terminal to overwrite what it just wrote. You could get the hang of it and make any kind of animation you want.

Best,
M. Katz

ee7klt@sfsu.edu (KL) wrote in message
news:<20fda9c1.0409171417.1319289@posting.google.com>...

```
> Hi,  
> I was trying to do a simple string animation whereby there is a  
> running number printed i.e. a number eg. of the form xxxx.xx that gets  
> updated continuously next to some plot in the display window (as  
> opposed to jumping discretely) while the program is crunching away in  
> a 'for loop'. Does any one have ideas on how I may do this?  
>  
> Also, this program calculates the path of some object thru' space. I'd  
> like to be able to have this line drawn in real-time in the display  
> window, corresponding to the running number.
```

>
> Thanks,
> KL
